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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/057,406	04/08/1998	HARALD WERENICZ	94-36-3-US-D	6379
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HB FULLER CO PATENT DEPARTMENT 1200 WILLOW LAKE BLVD. P.O. BOX 64683 ST PAUL, MN 55164-0683			AFTERGUT, JEFF H	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/057,406	Applicant(s) WERENICZ ET AL.	
	Examiner Jeff H. Aftergut	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 33-36, 38-42, 44 and 46-64 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 2-12, 33-36, 38-42, 44, and 46-64 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 2-12, 33-36, 38-42, 44, and 46-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maletsky et al '202 in view of E.P. 315,013 further taken with Smith et al and optionally further taken with Buell for the same reasons as expressed in paragraph 2 of the Office action dated September 14, 2004.
3. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with either one of Waggoner or U.K. 688,637 for the same reasons as expressed in paragraph 3 of the Office action dated September 14, 2004.

Response to Arguments

4. Applicant's arguments filed December 14, 2004 have been fully considered but they are not persuasive.

REMOVAL OF PRIOR ART FROM THE RECORD

As a preliminary matter, the applicant is advised that the VESTOPLAST product literature was not cited as part of the prior art rejection in this application, but rather it was cited to directly rebut the declaration submitted by Sharf Ahmed on July 14, 2004. It is agreed that the Office has the burden of establishing the specific date of a reference, however here the specific date is of little import as it was NOT APPLIED AS PRIOR ART in a rejection. Applicant's request to remove the listing of the VESTOPLAST literature from the 892 is denied. Applicant is advised that the proper recourse to have

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such material information removed from the file history is to submit a petition to expunge the reference from the record. Applicant has not taken the proper recourse to remove the reference from the listing on the 892 and the reference (which remains undated) is nonetheless still considered pertinent (as it rebuts the showing submitted in the declaration).

THE PRIOR ART REJECTION

As a preliminary matter, it should be noted that Maletsky expressly suggested that one skilled in the art would have employed a VESTOPLAST polymer for the hot melt adhesive film. As expressed in the Office action dated September 14, 2004, one skilled in the art viewing Maletsky would have known what type of VESTOPLAST to select from the various types available and such would have included VESTOPLAST having the same characteristics as claimed. This was addressed in the remarks in the Office action dated September 14, 2004 for which applicant has made no comments. It is therefore believed that one of ordinary skill in the art would have selected a polymer material having the specified properties for the operation as claimed in light of the teachings of Maletsky.

The applicant argues that there is no teaching, suggestion, or motivation for making the combination proposed in the outstanding Office action and that there is additionally no reasonable expectation of success. The applicant also argues that the proposed combination fails to enable one to make and use the claimed method. It should be pointed out that the applicant has drawn conclusions here without actually identifying where there is a lack of motivation and/or reasoning as well as a reasonable

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expectation of success (see page 3 of the response). Applicant is advised that the motivation for making the combination is clearly expressed in the previous Office action (the use of the conventional hot melt coating techniques of Smith were known useful techniques for application of thin films upon substrates including fabrics and papers in the processing of E.P. '013 where the reference expressly suggested that an extrusion device was used to apply the coating of a thin film of hot melt upon a nonwoven wherein such would have included hot melts based upon amorphous thermoplastics as well as the use of VESTOPLAST as suggested by Maletsky (note that Maletsky suggested that the use of amorphous thermoplastics or VESTOPLAST would have been useful in the operation and Maletsky additionally suggested that one skilled in the art would have applied the hot melt in an extrusion operation). The fact that applicant does not agree with these reasons is a reasonable argument, however, it is incorrect for applicant to conclude that there is no reason for making the combination when the reasons for making the combination have been expressed clearly to applicant in the last Office action as well as in the Examiner's Answer previously presented to the Board of Appeals.

As to the necessity for a reasonable expectation of success, the applicant is advised that one need to express absolute certainty in rendering the claim obvious under 35 USC 103. Here the reference to Maletsky expressly stated that extrusion would have been useful for applying the films therein onto the substrates. The reference to E.P. '013 additionally suggested one skilled in the art would have applied the films with a surface nozzle. The reference to Smith clearly expressed that extrusion coating

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of hot melt adhesives typically included an extruder and a gap between the extruder and the substrate where the film was allowed to travel prior to contact with the substrate.

This is merely what conventional extrusion coating entail. One would have expected that the same would have worked in the processing of Maletsky '202 and E.P. '013 as it was a common method of coating in the art as expressed by Smith. Thus, one skilled in the art would have reasonable expected success when using the coating techniques of Smith in Maletsky and E.P. '013 as such was suggested by the references to Maletsky and E.P. '013 and Smith clearly expressed such was commonplace in the art of applying a film upon a substrate.

The applicant argues that it is "undisputed that Maletsky do not teach a coating method that includes dispensing a continuous film of thermoplastic composition from a coating device and suspending the film between the coating device and the substrate." The applicant is advised that while the reference to Maletsky does not EXPRESSLY suggest the same, the reference did express that one would have employed an extrusion coating method for application of the film (and applicant concedes the same). Applicant argues that Maletsky does not provide additional information as to what the extrusion coating method is. Certainly, one skilled in the art would have been expected to look to the prior art to determine exactly what was meant by the "extrusion coating method" in Maletsky. One cannot read the reference in a vacuum of the prior art. One would have understood that the extrusion coating techniques referred to by Smith would have been the extrusion coating methods referred to by Maletsky as such are the

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conventional methods employed to apply a hot melt coating upon a substrate as expressed by Smith:

“Frequently, the coating is performed by the so-called hot-melt extrusion process. This type of process involves melting the olefin polymer, extruding the molten polymer through a slit-die to form a molten film and depositing the molten film onto the substrate it is desired to coat.”

In the coating operation referred to by Smith, there is clearly a gap between the slit die and the substrate as the film was formed at the exit of the die and then the so formed film was applied upon the substrate. Clearly, Smith expressly suggested that in the coating of a film upon a substrate it was known per se (and conventional in hot melt extrusion) to apply the film from an extruder die and suspend the film prior to contact with the substrate. It is undisputed that the reference to Smith suggested that extrusion coating would have entailed the suspension of the film from the die.

The applicant addresses the reference to E.P. '013 and states that the reference did not suspend the film from the nozzle in the reference and that the Brown declaration evidenced that one skilled in the art would not have been able to operate the E.P. reference in the manner described by the examiner where there was a gap between the nozzle and the surface. It should be pointed out that it is deemed reasonable when the claim recites a suspension of the film and/or a gap between the nozzle and the substrate to look to the specification to determine the exact scope of the gap or space between the nozzle and the substrate. Here, the specification defined the gap as being as small as 0.5 mm in length. It should be pointed out that there inherently would have been understood to have been a minute gap between the nozzle and the substrate otherwise the material at the tip of the nozzle would not be capable of being dispensed

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upon the substrate in film form (if there was always direct contact then the nozzle would not have been capable of dispensing the hot melt from the nozzle). The applicant is additionally advised as addressed in the previous Office action that the declaration by George Brown is not persuasive in that, for example, the reference operated the reference to E.P. '013 by running the web in the opposite direction to that depicted in the reference, the declaration did not test amorphous thermoplastic resins for the hot melt (and thus did not test the closest prior art) and the reference did not specify the gap utilized in the experimentation. The applicant has failed to reply to any of the comments presented in the first Office action dated September 14, 2004. It is therefore believed that the applicant agrees with the identified deficiencies in the declaration.

Regarding E.P. '013, the applicant argues that if there was a gap or space between the surface nozzle and the web in E.P. '013 the material exiting the die would simply fall to the ground and not coat the substrate and that the reference is not operable in the identified manner. The applicant is advised that the gap between the nozzle and the substrate may be minute (as little as 0.5 mm) and that one skilled in the art viewing the schematic drawings of E.P. '013 would have understood that the web traveled at an angle from above the nozzle to below the same such that the substrate being coated would have crossed the path of the film exiting the nozzle. Note that in Figure 2 the web comes from above the nozzle to below the same at an angle and would have been expected to pick up the film exiting the same. Additionally, one skilled in the art would not have operated the arrangement in a manner wherein the gap was so large and/or the path of the substrate was so divergent from the nozzle that the

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coating would have simply fallen on the ground. It is agreed that gravity plays a role in the coating operation, however the suspension of the film from the nozzle to the substrate does not require a great gap between the nozzle and the substrate. Note that Buell expressly suggested that if there had been contact between the film and the substrate that the film would have been applied as a discontinuous and broken up coating. Such would NOT have been desirable in E.P. '013 as the reference was forming a coating for a backsheet for a diaper which was liquid impermeable.

The applicant argues regarding Smith and Buell that these references were cited by the examiner not to cure the deficiencies of Maletsky and E.P. '013 (and that the examiner has repeatedly stated the same). Applicant is advised that the reference to Smith merely expresses what would have been meant by extrusion coating and coating with a slot nozzle in E.P. '013 and Maletsky. Clearly, using the conventional extrusion coating techniques which were expressly suggested by Maletsky would have resulted in the feeding of the material in such a manner that there would have been a gap and/or a suspended film from the slot nozzle prior to the application of the same upon the substrate. The applicant is advised that the prima facie case was not only presented in the last Office action but the identical rejection of the claims was affirmed by the Board of Appeals and Interferences. Clearly, a prima facie case has been presented in this application.

One skilled in the art would have understood as previously noted that E.P. '013 would have desired a continuous coating which was pinhole free on the surface of the substrate. If the coating applied were discontinuous then it would not been liquid

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impermeable. Applicant is advised that having a backsheet for a diaper liquid impermeable is of utmost import. Without the same, the urine in the diaper would leak out of the same. Clearly, a continuous coating was envisioned by E.P. '013. The applicant argues that the film must have holes therein in order to allow the air to pass, however this is a function of the molecular structure of the polymeric material applied as the size of air particles is clearly much smaller than that of liquids. Applicant is additionally advised that the water vapor transmission rates for films vary depending upon the composition of the films and that such films are continuous films but allow for water vapor to transmit through the films. As such, the ordinary artisan would have understood that the films of the prior art would have been continuous films and that there would have been no contact between the slot die exit of the nozzle and the substrate (the film would have been suspended from the die to the substrate).

Regarding the rejection of claims 3 and 4, the applicant argues that Smith would not have assisted in the repositioning of the die in E.P. '013 as the reference applied the film from a vertical nozzle while the reference to E.P. '013 was disposed in a horizontal direction. The applicant is advised that one skilled in the art reading the general description of extrusion coating provided by Smith would have readily understood that such meant the film was suspended and formed prior to be disposed upon the substrate one reason that this takes place, for example, has to do with the necking in (gauging) of the film as it exits the die. One skilled in the art is well aware of such processing. Additionally, one skilled in the art would have known how to operate the extrusion device of E.P. '013 in a manner shown in the reference wherein the "gap" was

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extremely small so that the film was not dropped upon the floor via gravity. In fact, applicant's earlier arguments contradicts the ones presented herein in that how is the film going to fall onto the floor as gravity acted upon the same any different from a vertical application of the film as was performed by Smith? If the film exiting the nozzle were to be falling vertically, the deposition of the film on the substrate is a vertical deposition. It should be noted that one skilled in the art would have been able to determine the proper gap size including sizes as small as 0.5 mm in order to ensure that the film was brought into proper contact with the web in E.P. '013 without dropping upon the floor as gravity acted upon the same. As Smith is considered relevant to the application of the films in a vertical manner so is the references to U.K. '637 and Waggoner.

In conclusion, one skilled in the art would have selected the specific hot melt material as exemplified by Maletsky and would have been driven to apply the same via an extrusion operation as expressly suggested by Maletsky. Such a conventional extrusion operation would have included the spacing of the nozzle from the substrate web as exemplified by the teachings of E.P. '013 and Smith either alone or further taken with Buell. No claims are allowed.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Aftergut
Primary Examiner
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